OBJECTIVE: Evaluate earnings associated with *early*, *late*, or *any* stages of ARM, a progressive vision-compromising condition, compared to a general elderly cohort. **METHODS:** Earnings of an ARM population ⩾65 years and a general cohort ⩾65 years were retrospectively evaluated to estimate potential earnings differences. ARM prevalence data were obtained from prospective landmark studies in the US, Australia, and The Netherlands. Prevalence data and census data, were used to estimate the number of ARM patients in these countries. Beaver Dam (BD) study income data were used to calculate the median income for each stage of ARM. US Social Security (SS) median income data for the general cohort population ⩾65 was calculated using identical BD income categories. BD income was adjusted for inflation and regional differences. By multiplying the estimated number of patients per given country within each specified earnings category of ARM by respective median incomes, annual societal earnings were calculated. Likewise, multiplying the number of elderly without ARM by the SS median annual income produced an income estimate of persons without ARM. **RESULTS:** Estimated BD incomes for persons with ARM ⩾65 years were $27,000, $21,000 and $27,000 for the *early*, *late*, and *any* groups, respectively. The income for the general population ⩾65 was estimated at $31,000. The *early* ARM group has higher earnings related to the higher prevalence of this cohort, and possibly higher per capita income in what is likely to be a younger sub-population. Total estimated earnings for the *any* ARM group were $240 billion. By comparison, the total income for "*no*" ARM was $803 billion. ARM patients are 26% of the ⩾65 years population but earn only 23% of this group's income. This pattern was repeated across five studies. **CONCLUSION:** The wage impact associated with ARM appears large and represents a significant indirect societal cost of AMD.

PMDE2

THE COST OF GLAUCOMA TREATMENT IN POLAND—RESULTS FROM OBSERVATIONAL STUDY

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OBJECTIVE: To define actual practice patterns for glaucoma and estimate the resources utilization, total cost of treatment and costs distribution in patients categorised into groups according to type of glaucoma and then stratified according to stage of illness. **METHODS:** The observational study included 193 patients with open-angle (OAG) and 122 patients with closed-angle glaucoma (CAG) recruited by ophthalmologist in Mazowian Regional Centre of Glaucoma Diagnosis and Treatment. Patients were categorised into OAG and CAG groups and then stratified according to intraocular pressure (<16 mmHg-I, 17–22 mmHg-II, >22 mmHg-III) or changes in C/D (C/D<0,5-a, C/D>0,6-b). Number of eyes in examined subgroups were: OAG I-154, II-165, III-45, 1–124, 2–240; CAG I-113, II-74, III-40, 1–114, 2–113, respectively. The perspective of health-care payers and time horizon 18 months were taken. Quantities of resources or services used and their costs were collected separately, and then quantities multiplied by the price. Costs were summarized for the main resource categories (pharmaceuticals, outpatient consultations, surgery, laser therapy). Resources used and costs in each group were calculated per 100eyes/1year, what permitted a cross-group comparison. **RESULTS:** The total cost of glaucoma treatment was highest in CAG-III (108032 PLN/100eyes/1year, 1 USD = 4,5 PLN) and OAG-III or b (99400 PLN/100eyes/1year). The major cost driver in CAG-a and OAG-b was surgery (36% of total costs), in all other, mostly in stage III, were pharmaceuticals: in OAG-III and CAG-III–50%, in OAG-b – 40% of total costs. In OAG-2 and CAG-b, CAG-I and CAG-II 30% of total costs arose from surgery. The most frequent used pharmaceuticals were: in OAG–timolol, in CAG–pilocarpine. The third–dorzolamid-was used in OAG nad CAG, most frequent in stage III. **CONCLUSION:** The total cost of glaucoma treatment and costs distribution depends on the severity of illness. Beyond CAG-a and OAG-b group, the most expensive was pharmacological treatment.

PMDE3

COST-EFFECTIVENESS ANALYSIS OF CONTINOUS TERBINAFINE VS INTERMITTENT ITRACONAZOLE IN THE TREATMENT OF TOENAIL ONYCHOMYCOSIS IN POLAND

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OBJECTIVE: To compare costs and effects of continuous terbinafine and intermittent itraconazole in the treatment of toenail onychomycosis in Poland. This was intended to facilitate the decision-making process in selecting the more cost-effective treatment for toenail onychomycosis. **METHODS:** L.I.O.N. study results were used to estimate effectiveness of terbinafine 0,25 g/d for 12 or 16 weeks (T12, T16) and itraconazole 0,4 g/d for 1 week in every 4 weeks for 12 or 16 weeks (I3, I4). The measure of treatment effectiveness was complete cure and average number of disease-free days per patient. Direct medical costs were estimated on the basis of current treatment patterns in Poland. The perspective of health care payers and time horizon of 72 weeks were taken. The decision model was used to quantify cost and effectiveness of alternative treatments. One-way, two-way sensitivity analysis and treshold analysis were performed. **RESULTS:** Cost/patient cured and cost/disease-free day were (in PLN, 1 USD = 4,5 PLN)): for T12 - 2199 and 10,6 for T16 - 2279 and 10,6, for I3 - 4207 and 16,9, for I4 - 4670 and 20,3. Incremental analysis suggests, that I3 and I4 are dominated programs,

T12 and T16 are cost-effective. In deciding between them, the size of the available budget must be brought to bear. T12 ensures greatest effect within fixed budget. One-way sensitivity analysis indicated, that T16 would be optimal choice only when probability of complete cure for T16 was >0,57 or probability of complete cure for T12 was 0,41–0,43. In two-way sensitivity analysis T16 was optimal choice only when probablitity of complete cure I3 and T12 or I4 and T12 were changed simultaneously. The treshold analysis suggests, that I3 and I4 would be optimal, when the price of itraconazole would be decreased by 63%. **CONCLUSION:** In Poland T12 was the most cost-effective treatment of toenail onychomycosis.

PMDE4

PHARMACOECONOMIC EVALUATION OF CALCIPOTRIOL AND UVB IN THE TREATMENT OF PSORIASIS IN THE NETHERLANDS

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OBJECTIVE: To compare the economic impact of treating psoriatic patients in the Netherlands with calcipotriol cream used daily combined with twice weekly UVB treatment to emollient used daily combined with UVB given three times weekly. **METHODS:** A pharmacoeconomic analysis based on a Markov model was performed for the Netherlands by combining information regarding 1) reduction in Psoriasis Assessment of Severity Index (PASI) and relapse rates from a clinical study, 2) costs and standard clinical practice from a questionnaire survey and 3) a Dutch dermatology consensus panel. Costs of UVB treatments (staff, equipment, travelling), second line treatment (PUVA), drug costs (calcipotriol, emollient) and indirect costs due to absence from work were included in the analysis. **RESULTS:** The costs of treating psoriasis in the Netherlands over 20 weeks with calcipotriol and twice weekly UVB sessions is estimated to EUR 1,175.90. With three weekly UVB sessions plus an emollient the costs is estimated to EUR 1,212.14. **CONCLUSION:** Adding calcipotriol to UVB phototherapy is a cost-neutral alternative to UVB phototherapy used with an emollient. But, with calcipotriol and UVB as treatment strategy a number of essential beneficial effects for the patients are obtained such as less exposure to potentially carcinogenic radiation, less risk of developing photoaging of the skin and less inconvenience to patients due to fewer UVB sessions.

PMDE5

COST-EFFECTIVENESS OF BRINZOLAMIDE VERSUS DORZOLAMIDE IN THE TREATMENT OF OCULAR HYPERTENSION AND PRIMARY OPEN ANGLE GLAUCOMA

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OBJECTIVE: The aim of this study was to compare the cost-effectiveness of brinzolamide, a new topical carbonic anhydrase inhibitor (CAI), with topical dorzolamide in France, Italy and Portugal for the treatment of ocular hypertension (OH) and primary open-angle glaucoma (POAG). **METHODS:** High intra-ocular pressure (IOP) is the major prognostic factor of POAG, and these two drugs were developed to control it. Successful treatment was defined as an IOP decrease of at least 5 mm Hg or any reduction to a value below 21 mm Hg. Four double-masked well-controlled randomized trials, three lasting 3-month and one 12-months, compared the response rate of brinzolamide bid and tid versus dorzolamide tid, and the response rate of brinzolamide bid versus bid dorzolamide timolol combination bid. The local tolerance upon instillation of the 2 drugs was compared through 2 dedicated studies. The consequence of the instillation tolerance was valued through an American HMO data base. The daily cost of each drug took into account the number of drops in a bottle, valued through a well-balanced analysis of variance. In case of failure, either due to intolerance or inadequate efficacy, the patients were treated with latanoprost. A model was developed to evaluate the cost of initiating a treatment with a CAI (dorzolamide versus brinzolamide) over 3 months. The economic perspective taken was that of society. **RESULTS:** As a mono-therapy, brinzolamide bid was found to be as efficacious as dorzolamide tid. Brinzolamide bid plus timolol was also as efficacious as a combination of dorzolamide and timolol bid. Stinging upon instillation with brinzolamide was far less ($P < 0.0001$) than with dorzolamide. The probability that brinzolamide-treated patients would change therapy was 1.28 (HMO study, $P < 0.05$) less than the one of dorzolamide-treated patients. The size of the brinzolamide drop is 18.7% smaller allowing 7 more therapy days per bottle than dorzolamide mono-therapy when brinzolamide is used bid and 5 days when used tid. Consequently, the breakeven price of brinzolamide was 10% higher than dorzolamide in France and Portugal and 15% in Italy, where CAIs were more often prescribed as mono-therapy. **CONCLUSION:** Because (1) the daily cost of brinzolamide is lower (2) brinzolamide can be prescribed bid in mono-therapy (3) and brinzolamide stings less, our model suggested that brinzolamide is a cost-effective alternative in the treatment of OH and POAG.